

### ABSTRACT OF THE DISCLOSURE

Disclosed are a navigation apparatus and a method for calculating an optimum travel route thereof. The calculating method comprises the steps of a) detecting present location information of a movable body in response to a user's request for the optimum travel route to a designated destination, b) detecting present link information corresponding to the present location information of the movable body from stored map data, c) detecting information of links neighboring the present link in the direction of the destination from the map data, d) calculating a cumulative travel time from the present location of the movable body to each neighboring link using the predetermined weighted values assigned to each of traveling directions of the present link information and the information of the neighboring links, e) selecting one optimum neighboring link information out of the neighboring link information detected from the map data according to the calculated cumulative travel time of each neighboring link, and f) repeating steps c) to e), subsequently detecting the optimum travel route from the selected optimum neighboring link information when a finally selected optimum neighboring link information includes destination information, and outputting the detected optimum travel route. The method for calculating the optimum travel route using the navigation apparatus of the present invention improves the probability that the vehicle requesting the optimum travel route is in the range of the optimum travel route provided by the navigation apparatus.